

ADDITIONAL SHEET

CCR#: 04-0199

Rev:

Originator: Maryellen Corbett

Telephone: 301-925-0703

Office: COTS Maint.

Title of Change: Release of Customized WU-FTP Patch to GSFC/EDC for installation.

This delivery contains a customized version of WU-FTP COTS product, a change to the baseline for the WU-FTP COTS product for Data Pool hosts for Pathfinder DAACs. It contains fixes for the following NCRs:

NCR Number	Subsystem	Sev	State	Site	Description
ECSed 38545	DPL	5	V	GSFC	Need to checksum Data Pool files at download time
ECSed 38857	DPL	2	V	GFSC	Customized WU-FTP should handle non-standard mount points.
ECSed 38875	DPL	3	V	GSFC	Customized WU-FTP always reports checksum error for directory download
ECSed 39274	DPL	2	V	GSFC	Customized WU-FTP always reports checksum error for browse download
ECSed 39275	DPL	2	V	GSFC	Customized WU-FTP always reports checksum error for XML download
ECSed 40117	DPL	2	V	EDF	Customized wu-ftp writes Sybase password to /var/admin/messages
ECSed 40118	DPL	2	V	EDF	Customized wu-ftp does not free shared memory
ECSed 40119	DPL	3	V	EDF	Customized wu-ftp does not time stamp messages in xferlog
ECSed 40069	DPL	3	V	EDF	Wuftp accessed 6A08 DIFile with improper directory path format

The following NCR was generated 4/2/2004 in the PVC. This NCR is being worked, but is not resolved in this delivery. Resolution is expected with PSR delivery.

NCR Number	Subsystem	Sev	State	Site	Description
ECSed 40159	DPL	3	A	PVC	Customized WU-FTP always writes debug messages to /var/admin/messages.

The patch is to be installed on the following machines:

- g0dps01
- e0dps01

The patch was tested successfully in the Functionality Lab and PVC. Test report is included in this document after the Installation instructions.

INSTALLATION INSTRUCTIONS for WU-FTP Rel7

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The following provides the installation and configuration procedures to install wuftp_rel7.

Prerequisites

Installation Time: 15 minutes for a novice installer

Uninstall Instructions

None

Installation Instructions

The delivered files, ftpd_rel7_wuftp and wu-ftp_tools.tar, are assumed to be in /var/tmp.

1. If testing with Release 7, verify that the DataPool database contains patches 7050 and 7054. For testing with Release 6A08, create the ecldlftpsrvr login and user manually, with the following steps.

- a. Login to the dataserver as "SA". Issue the following Sybase commands:

```
1> sp_addlogin ecldlftpsrvr, "welcome", tempdb
2> go
1> use DataPool_<mode>
2> go
1> sp_adduser ecldlftpsrvr
2> go
1> grant select on DlFile to ecldlftpsrvr
2> go
```

- b. Verify that the user has been granted select on the table DlFile:

```
1> sp_helprotect DlFile
2> go
```

- c. Login to the dataserver as the ecldlftpsrvr user and use the following commands:

```
1> use DataPool_<mode>
2> go
1> set rowcount 1
```

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```
2> go

1> select * from DlFile

2> go

1> set rowcount 0

2> go

> exit
```

2. If you have already previously installed /datapool/OPS/user/tools, skip to step6.
3. Install the wu-ftp_tools.tar files on the Data Pool Host.

```
#cd /datapool/OPS/user ↵ (or wherever the datapool is at your DAAC)

#cp /var/tmp/wu-ftp_tools.tar . ↵

#tar -xvf wu-ftp_tools.tar ↵
```

4. Copy in the Sybase interfaces file:

```
#cp /tools/sybOCv12.0.0/interfaces tools/sybOCv12.0.0 ↵
```

[Note that you may want to generate an interfaces file for this use only. In that case, add only the logical name of the Datapool Sybase server to the interfaces file.]

5. Change the owner and protections of the files under /datapool/OPS/user/tools

```
#chown -R root:bin tools ↵

#chmod -R a-w tools ↵
```

6. Back up the old ftp daemon

```
#cd /usr/local/sbin ↵

#mv in.ftpd in.ftpd.<backup_date> ↵
```

7. Install the new ftp daemon

```
#mv /var/tmp/ftpd_rel7_wuftp /usr/local/sbin/in.ftpd ↵

#chown bin:bin in.ftpd ↵

#chmod -rw in.ftpd ↵

#chmod o-x in.ftpd ↵
```

8. Back up the ftpd access configuration file.

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```
#cp /etc/ftpd/ftpaccess /etc/ftpd/ftpaccess.<backup_date> ↵
```

9. Edit the ftpd access configuration file. (/etc/ftpd/ftpaccess):

At the end of the ftp access file, add lines for each of the following parameters

- a. **noretrieve /datapool/OPS/user/tools/sybOCv12.0.0**

(prevents anonymous users from downloading the Sybase configuration files)

- b. **dbpct 100**

(number from 0-100. The percentage of files that you want to have checksummed)

- c. **dbsrv <DAAC Datapool Sybase Server>**

(the logical name of the Sybase server for the datapool database, e.g., g0acg05_srvr)

- d. **dbuser b650457f470c05ee565b32a4b81a8dd2**

(The encrypted database username. To encrypt the username, run “/usr/ecs/OPS/CUSTOM/bin/OMS/EcOmCryptoCliDriver 0”. Enter the user name, ecldftpsrvr. The encrypted username will be printed. It will be b650457f470c05ee565b32a4b81a8dd2)

- e. **dbpass ba3d89c0563293fa**

(The encrypted password of the database user. To encrypt the password, run “/usr/ecs/OPS/CUSTOM/bin/OMS/EcOmCryptoCliDriver 0”. Enter the ecldftpsrvr user’s password. The encrypted password will be printed. It will be ba3d89c0563293fa)

- f. **dplroot datapool**

(The first word of the datapool directory. For example, if the directory is “/datapool/OPS/user”, then this is datapool.)

- g. **cmds /bin/compress,/bin/gzip,/bin/zip,/bin/unzip**

(A comma-separated list of commands from the ftpconversions file to indicate which of the commands in the ftpconversions file will be preceded by checksumming.)

An **example** of the ftpaccess additions is provided below:

```
noretrieve /datapool/OPS/user/tools/sybOCv12.0.0
```

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```
dbpct 100

dbsrv g0acg05_srvr

dbuser b650457f470c05ee565b32a4b81a8dd2

dbpass ba3d89c0563293fa

dplroot datapool

cmds /bin/compress,/bin/gzip,/bin/zip,/bin/unzip
```

Custom Code Integration

None

Interrogation Checkout

SUN Data Pool hosts:

Interrogation will use checksumming to identify the correct installation of Customized WU-FTP.

The *in.ftpd* binary in the directory */usr/local/sbin/* will be interrogated for the filesize 3705364 bytes.

Interrogation will use the following query:

```
/usr/ucb/ls -la /usr/local/sbin/in.ftpd | /usr/bin/awk '{print $4}'
```

The interrogation should return: 37053648

Interrogation will also verify that the */datapool/OPS/usr/tools* directory exists.

Back-Out Instructions

1. Remove the */datapool/OPS/user/tools* directory:

```
# cd /datapool/OPS/user ↵
```

```
# rm -rf tools↵
```

2. Restore the previous *in.ftpd* binary:

In */usr/local/sbin*, copy the old, backed-up binary *in.ftpd.<backup_date>* to the location of the operational binary.

```
# cd /usr/local/sbin ↵
```

```
# cp in.ftpd.<backup_date> in.ftpd ↵
```

```
# chown bin:bin in.ftpd ↵
```

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```
# chmod -rw in.ftpd ↵
```

```
# chmod o-x in.ftpd ↵
```

3. Restore the previous ftpd access configuration file:

```
#cp /etc/ftpd/ftpaccess.<backup_date> /etc/ftpd/ftpaccess ↵
```

Test Report & Procedures

Test Report for customized wu-ftp for Data Pool (NCR 38545)

1.0 Introduction

1.1 General:

This test report describes testing and verification of the customized wu-ftp for Data Pool, which is being delivered to the DAACs in response to Sev 5 NCR ECSed38545: Need to checksum Data Pool files at download time. In response to this NCR, the freeware wu-ftp daemon which is run on the x0dps01 Data Pool host has been customized to checksum Data Pool files when they are downloaded, to compare this checksum to the appropriate checksum stored in the Data Pool database, and to notify users of any checksum mismatches.

See Release 7 Ticket CK_70_02, Checksum Verification on Data Pool Download, for a detailed description of how this capability was implemented and tested.

1.2 Delivery history:

A 6A08 TE for this capability was delivered to GDAAC only in November 2003. GDAAC performed initial testing of the TE, but found a number of problems which were documented as NCRs. A decision was made to correct the problems and to make a formal delivery of the customized wu-ftp product at the same time as the Release 7 delivery.

1.3 Baseline Applicability

This version of the customized wu-ftp was tested in conjunction with both the 6A08 Data Pool (in the EDF) and with the Release 7 Data Pool (in the PVC). The same wu-ftp code works with either ECS custom code baseline.

2.0 NCRs included:

- ECSed38545: Need to checksum Data Pool files at download time

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- ECSed39275: Customized wu-ftp always reports checksum error for xml download
- ECSed39274: Customized wu-ftp always reports checksum error for browse download
- ECSed38875: Customized wu-ftp always reports checksum error for directory download
- ECSed40117: Customized wu-ftp writes Sybase password to /var/adm/messages
- ECSed40118: Customized wu-ftp does not free shared memory
- ECSed40119: Customized wu-ftp does not timestamp messages in xferlog
- ECSed40069: Wuftp accessed 6A08 DIFile with improper directoryPath format
- ECSed38857: GSFC/SMC: customized wu-ftp checksum TE should handle nonstd. mount pts

3.0 Test Results

All Release 7 testing described in this section took place against the installed customized wu-ftp tar file in the PVC TS1 mode between 3/27/04 and 4/2/04. Anonymous ftp was set up for TS1 mode.

All Release 6A08 testing of the customized wu-ftp took place in the EDF DEV04 mode, between 3/23/04 and 3/31/04.

3.1 Installation

The customized wu-ftp was installed per the installation instructions on p2dps01 in the PVC.

3.2 Verification for NCRs included in Patch

All NCRs listed in Section 2.0 passed verification. See the Verification enclosures in the NCRs for descriptions of the verification procedures.

3.3 NCRs written during testing

The following NCRs were written during testing of this patch:

ECSed40159: customized wu-ftp always writes debug messages to /var/adm/messages

3.4 Functional Testing

Each of the test criteria in CK_70_02: Checksum Verification on Data Pool Download, was tested in a Release 7 environment in the PVC, against the customized wu-ftp tar file and binary installed on p2dps01. All test criteria passed.

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Those test criteria applicable to 6A08 (i.e., those test criteria not related to CKSUM checksums or to compressed files in the Data Pool; these are criteria 10,30,40,50,60,70,90) were tested in a 6A08 environment in the EDF. All test criteria passed.

Formal / witnessed testing was not required for this ticket/capability.

3.5 Load Testing/Regression Testing

The customized wu-ftp, with dbpct set to 100, was in place in the PVC during load testing on 3/27/04, 4/1/04, and during the 24 hour run on 4/2/04 – 4/3/04. Ftp download scripts from the Data Pool web access GUI were run during this load and performance testing. No ftp download problems were reported.